

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Imajo, Nobuko
Yamagata, Yukari
Kato, Hideo
Satomura, Shinji
Nakamura, Kenji
- (ii) TITLE OF INVENTION: POLYPEPTIDE AND PROCESS FOR MEASURING
LIVING BODY COMPONENTS USING THE SAME
- (iii) NUMBER OF SEQUENCES: 23
- (iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: ARMSTRONG, WESTERMAN, HATTORI, MCLELAND &
NAUGHTON
(B) STREET: 1725 K Street, Suite 1000
(C) CITY: Washington
(D) STATE: DC
(E) COUNTRY: USA
(F) ZIP: 20006
- (v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: US 08/680,855
(B) FILING DATE: 16-JUL-1996
(C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
(A) APPLICATION NUMBER: JP 07-203886
(B) FILING DATE: 18-JUL-1995
- (viii) PRIOR APPLICATION DATA:
(A) APPLICATION NUMBER: JP 08-084770
(B) FILING DATE: 13-MAR-1996
- (ix) ATTORNEY/AGENT INFORMATION:
(A) NAME: McLeland, Le-Nhung
(B) REGISTRATION NUMBER: 31,541
(C) REFERENCE/DOCKET NUMBER: 960587
- (x) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: 202-659-2930
(B) TELEFAX: 202-8870357

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 7 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS:
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide

(A) NAME/KEY: Modified-site
(B) LOCATION: 7
(D) OTHER INFORMATION: /product= "B-alanine"

Ala Ser Ser Ser Ser Ser Ala
1 5

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ix) FEATURE:

(A) NAME/KEY: Modified-site.
(B) LOCATION: 2..4
(D) OTHER INFORMATION: /product= "Sulfated Serine"

(A) NAME/KEY: Modified-site
(B) LOCATION: 5
(D) OTHER INFORMATION: /product= "B-alanine"

Ala Xaa Xaa Xaa Ala
1 5

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: 2..6
(D) OTHER INFORMATION: /product= "Sulfated Serine"

(A) NAME/KEY: Modified-site
(B) LOCATION: 7
(D) OTHER INFORMATION: /product= "B-alanine"

Ala Xaa Xaa Xaa Xaa Xaa Ala
1 5

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 2..9
 - (D) OTHER INFORMATION: /product= "Sulfated Serine"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 10
 - (D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala
 1 5 10

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1..8
 - (D) OTHER INFORMATION: /product= "Sulfated Serine"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 9
 - (D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala
 1 5

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 13 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

T06T00+6E3B60

(D) OTHER INFORMATION: /product= "Sulfated Serine"

Ala Ala Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10

(D) TOPOLOGY: linear

(D) OTHER INFORMATION: /product= "Sulfated Serine"

(D) OTHER INFORMATION: /product= "B-alanine"

Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Ala
20

(D) TOPOLOGY: linear

(D) OTHER INFORMATION: /product= "Sulfated Serine"

(D) OTHER INFORMATION: /product= "B-alanine"

(B) LOCATION: 6..8

(D) OTHER INFORMATION: /product= "Sulfated Serine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 9

(D) OTHER INFORMATION: /product= "B-alanine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 10..12

(D) OTHER INFORMATION: /product= "Sulfated Serine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 13

(D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Ala	Xaa	Xaa	Xaa	Ala	Xaa	Xaa	Xaa	Ala	Xaa	Xaa	Xaa	Ala
1				5				10				

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 10 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS:

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 2..3

(D) OTHER INFORMATION: /product= "Sulfated Serine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 4

(D) OTHER INFORMATION: /product= "B-alanine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 5..6

(D) OTHER INFORMATION: /product= "Sulfated Serine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 7

(D) OTHER INFORMATION: /product= "B-alanine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 8..9

(D) OTHER INFORMATION: /product= "Sulfated Serine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 10

(D) OTHER INFORMATION: /product= "B-alanine"

F06T0044EEBES0

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Ala Xaa Xaa Ala Xaa Xaa Ala Xaa Xaa Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2..4
- (D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Ala Xaa Xaa Xaa Ala
1 5

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2..5
- (D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Ala Xaa Xaa Xaa Xaa Ala
1 5

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 2..5

(D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Ala Xaa Xaa Xaa Xaa

1

5

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 7 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS:

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 2..6

(D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 7

(D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Ala Xaa Xaa Xaa Xaa Xaa Ala

1

5

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 6 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS:

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 2..6

(D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Ala Xaa Xaa Xaa Xaa Xaa

1

5

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2..8
- (D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala
 1 5

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2..8
- (D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2..9
- (D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(A) NAME/KEY: Modified-site
(B) LOCATION: 10
(D) OTHER INFORMATION: /product= "B-alanine"

Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala
1 5 10

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(A) NAME/KEY: Modified-site
(B) LOCATION: 2..9
(D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 12 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(A) NAME/KEY: Modified-site
(B) LOCATION: 2..11
(D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(A) NAME/KEY: Modified-site
(B) LOCATION: 12
(D) OTHER INFORMATION: /product= "B-alanine"

Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2..9
- (D) OTHER INFORMATION: /product= "Sulfated Serine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 10..14
- (D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1..8
- (D) OTHER INFORMATION: /product= "Sulfated Serine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9..13
- (D) OTHER INFORMATION: /product= "Sulfated Tyrosine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2..6
- (D) OTHER INFORMATION: /product= "Phosphated Tyrosine"

T05160:465330

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 7
- (D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Ala Xaa Xaa Xaa Xaa Xaa Ala
 1 5

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 7
- (D) OTHER INFORMATION: /product= "B-alanine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Ala Tyr Tyr Tyr Tyr Tyr Ala
 1 5

T O T S O " H E E B E E O